

REGION 5
77 West Jackson Boulevard
Chicago, Illinois 60604

Office of Enforcement

CHAIN OF CUSTODY RECORD

PROJ. NO. O2AH31		PROJECT NAME Cheshire Monitoring study		NO. OF CON- TAINERS		Activity Code: 12345											
SAMPLERS: (Print Name and Sign) Mike Murphy <i>Mike Murphy</i>						AIR 20020038											
STA. NO.	DATE	TIME	COM P			GRA B	STATION LOCATION	TAG NUMBERS									
D01	2/1	00:00	X		GHS	1											5-340147 1 to 1
S01	2/1	00:00	X		GHS	1											5-340146 1 to 1
S02	2/1	00:00	X		RVHS	1											5-340148 1 to 1
S03	2/1	00:00	X		ADDAVILLE	1											5-340149 1 to 1
																	GHS 3012, Pstg Avg = 18.75
																	GHS 3013, Pstg Avg = 18.9
																	RVHS 3009, Pstg Avg = (NO RUN - Power Failure)
																	Addaville 3011, Pstg Avg = 18.2
Relinquished by: (Signature)			Date / Time		Received by: (Signature)			Ship To:									
<i>Mike Murphy</i>			02-01-02 1347		<i>William S. [Signature]</i>												
Relinquished by: (Signature)			Date / Time		Received by: (Signature)			ATTN:									
Relinquished by: (Signature)			Date / Time		Received for Laboratory by: (Signature)			Date / Time		Airbill Number							
					<i>William S. [Signature]</i>			2/21/02 12:16pm		UPS #12 40719901 40084466							
													Chain of Custody Seal Numbers				

5-140036

Project No. O2AH31 Project Name CHESHIRE MONITORING STUDY 901014
 AIR 20020038 ARRIVAL DATE 2/21/2002 DUE DATE: 3/14/2002

Sampler
 Mike Murphy

Cooler ID O2AH311 **Page** 5-140036

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
O2AH31D01	D01	01/02/2002 00:00:00	<input type="radio"/> Grab <input checked="" type="radio"/> Com	GHS	1	5-340147 1 to 1

Bottle No. 1 **Parameter**
 PM10

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
O2AH31S01	S01	01/02/2002 00:00:00	<input type="radio"/> Grab <input checked="" type="radio"/> Com	GHS	1	5-340146 1 to 1

Bottle No. 1 **Parameter**
 PM10

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
O2AH31S02	S02	01/02/2002 00:00:00	<input type="radio"/> Grab <input checked="" type="radio"/> Com	RVHS	1	5-340148 1 to 1

Bottle No. 1 **Parameter**
 PM10

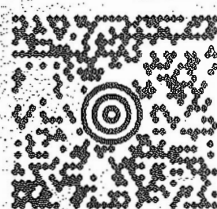
Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
O2AH31S03	S03	01/02/2002 00:00:00	<input type="radio"/> Grab <input checked="" type="radio"/> Com	ADDAVILLE		1

Bottle No. 1 **Parameter**
 PM10

Note: There WAS NO RUN on
 sampler # 3009, RVHS on
 2-1-02.

FROM:
SOUTHEAST DISTRICT OFFICE
(740) 385-8501
OHIO EPA
2195 E. FRONT STREET
LOGAN OH 43138-8637

1 LBS 1 OF 1



IL 606 9-08



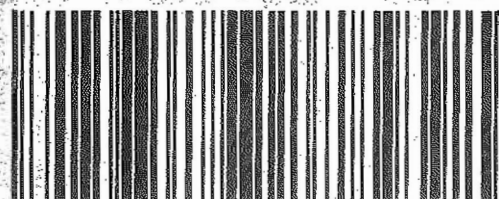
SHIP TO:

WILLIAM SARGENT JR.
USEPA CENTRAL REGIONAL LABORATORY
10 FLOOR
536 SOUTH CLARK STREET
CHICAGO IL 60605

UPS NEXT DAY AIR

TRACKING #: 1Z 401 199 01 4008 4466

1



BILLING: P/P

EXTREMELY URGENT



UPS Next Day Air.

United Parcel Service, Louisville, KY

UOW 3.5.1 Konica F 14.0A 06/2001

CENTRAL REGIONAL LABORATORY

Data Checklist

Data Set AIR 2002 0038 CHESHIRE MONITORING

- ☒ Chain-of-Custody
- ☒ Analysis Request Form(s)*
- ☐ Sample Tags
- ☒ Transmittal Report w/signatures of the following:
 - Analyst (s)
 - Data Management Coordinator

* Analysis Request Forms provide the data user a means to connect sample numbers with sampling locations

Prepared by:

Sylvia Griffin 3-5-2002
Data Management Coordinator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

Date:

MAR 05 2002

Subject: Review of Region 5 Data for **CHESHIRE MONITORING STUDY**

From: **Edgar Santiago, Chemist** E.S.
Region 5 Central Regional Laboratory

To:

ttached are the results for: **CHESHIRE MONITORING STUDY**

CRL data set number: **20020038**

Samples analyzed for: **Suspended Particles**

Results are reported for sample designations: **2002AH31D01, 2002AH31S01, and 2002AH31S03.**

MAR 05 2002

Data Management Coordinator and Date Received

Date Transmitted: MAR 05 2002
/ /

Please have the U.S. EPA Project Manager/Officer complete the Customer Satisfaction Survey, attached, or call the CRL Sample Coordinator at 3-1226.

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
ML-10C

/ /
Received by and Date

Comments:

CRL Data Review Qualification Codes

QUALIFIER	DESCRIPTION
B	This flag is used when the analyte is found in the associated <u>B</u> lank as well as the sample. It indicates possible blank contamination and warns the user to take appropriate action while assessing the data. See the case narrative for a discussion of common lab contaminants and/or the relative concentration of contamination in the samples and blanks for relevance.
J	This flag is used when the analyte is <u>estimated</u> due to quality control limit(s) being exceeded. This flag accompanies all GC/MS tentatively identified compounds (TICs). This flag also applies to a suspected, unidentified interference. This flag is placed on affected detected results as well as non-detected (i.e., "U" flagged) results. (<u>J</u> is the flag used in the Superfund CLP SOW and Data Review Functional Guidelines and is used by CRL for consistency.)
M	This flag is used when the analyte is confirmed to be qualitatively present in the sample, extract or digestate, with a quantity at or above the CRL <u>M</u> ethod Detection Limit (MDL) but below the lowest concentration of the calibration curve. This flag indicates the quantitated value is <u>estimated</u> since it falls below the lowest calibration standard in the calibration curve.
N	This flag applies to GC/MS <u>T</u> entatively Identified Compounds (TICs) that have a mass spectral library match.
Q	This flag applies to analyte data that are severely estimated due to quality control and/or <u>Q</u> uantitation problems, but are confirmed to be qualitatively present in the sample. <u>No value is reported with this qualification flag.</u>
R	This flag applies to analyte data that are <u>R</u> ejected and unusable due to severe quality control, quantitation and/or qualitative identification problems. No other qualification flags are reported for this analyte. <u>No value is reported with this qualification flag.</u>
U	This flag is used when the analyte was analyzed for but <u>U</u> ndetected in the sample. The CRL RL for the analyte accompanies this flag. When the customer requests CRL to report below our RL down to our MDL, undetected analytes are reported with a "U" code and the MDL. As with sample results that are positive, the value is corrected for dry weight, dilution and/or sample weight or volume.

ENVIRONMENTAL PROTECTION AGENCY
REGION V
CENTRAL REGIONAL LABORATORY
FINAL RESULT REPORT FOR THE TEAM: ANALYTICAL AND INORGANIC (A&I)

DIVISION/BRANCH: AIR DIVISION SAMPLING DATE: 02/01/2002 LAB ARRIVAL DATE: 02/21/2002 DUE DATE: 03/14/2002
DU NUMBER: 90101A DATA SET NUMBER: 20020038 STUDY: CHESHIRE MONITORING STUDY PRIORITY: 1 LABORATORY :CRL

SAMPLE #	CRL LOG NUMBER	SAMPLE DESCRIPTION	SUSPENDED PARTICLE (g/filter)			
1	2002AH31S01	GUIDING HANDS SCHOOL	0.0000			
2	2002AH31D01	GUIDING HANDS SCHOOL	0.0000			
3	2002AH31S03	ADDAVILLE	0.0039			
DATE OF ANALYSIS			02/26-27/2002			
ANALYST			E.S			

Reviewed by: FA Date: 3/1/2002

Data Set Number:	<u>20020038</u>	Parameter:	<u>Suspended Particles</u>
Facility Name:	<u>CHESHIRE MONITORING STUDY</u>		
Study Name:	<u>CHESHIRE MONITORING STUDY</u>		
Date of Narrative:	<u>02/27/2002</u>	Analyst:	<u>ES</u>
		Signature:	<u>E.S.</u>

ANALYSIS CASE NARRATIVE

Three (3) exposed filters were received for suspended particle analysis at the Central Regional Laboratory (CRL) on February 21, 2002. Those filters were fractions of clean filters, prepared at the CRL and sent to the field for exposure. Filter identification numbers and other pertinent information obtained from the individual filters and packaging envelopes are presented in the table below.

Filters ID	Samples ID	Tag Number
Q6280008	2002AH31D01	5-340147
Q6280006	2002AH31S01	5-340146
Q6280007	2002AH31S03	5-340149

Filter equilibrations and final weighting of exposed filters were performed according to CRL.SOP AIG047. Analysis of exposed filters began on 02/26/2002 and was completed on 02/27/2002. All exposed filters were in good conditions.

QUALITY CONTROL (QC):

Analysis results were evaluated using the QC requirements of CRL.SOP AIG047. All the required quality control criteria for the laboratory, method, and system performance audits were evaluated and determined to be within the limits.

SAMPLE RESULTS:

All the sample results are acceptable for use.

ELECTRONIC DATA:

No electronic data.

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

CHAIN OF CUSTODY RECORD

REGION 5
77 West Jackson Boulevard
Chicago, Illinois 60604

PROJ. NO. O2AH31		PROJECT NAME Cheshire Monitoring study				NO. OF CON- TAINERS	<div style="text-align: right;">Activity Code: 12345</div> <div style="text-align: center; font-size: 2em; font-family: cursive;">AIR 20020038</div>										
SAMPLERS: (Print Name and Sign) Mike Murphy <i>Mike Murphy</i> <i>Mike Murphy</i>																	
STA. NO.	DATE	TIME	COM P	GRA B	STATION LOCATION												
D01	2/1	00:00	X		GHS	1											5-340147 1 to 1
S01	2/1	00:00	X		GHS	1											5-340146 1 to 1
S02	2/1	00:00	X		RVHS	1											5-340148 1 to 1
S03	2/1	00:00	X		ADDAVILLE	1											5-340149 1 to 1
																	GHS 3012, Pstg Avg = 18.75
																	GHS 3013, Pstg Avg = 18.9
																	RVHS 3009, Pstg Avg = (NO RUN
																	- Power Failure)
																	Addaville 3011, Pstg Avg = 18.2
Relinquished by: (Signature) <i>Mike Murphy</i>						Date / Time 02-01-02 1347		Received by: (Signature) <i>William Lopez</i>						Ship To:			
Relinquished by: (Signature)						Date / Time		Received by: (Signature)						ATTN:			
Relinquished by: (Signature)						Date / Time		Received for Laboratory by: (Signature) <i>William Lopez</i>				Date / Time 2/21/02 12:10 PM		Airbill Number UPS #12 407 19901 4008 4466			
														Chain of Custody Seal Numbers			

5-140036

Project No. O2AH31 Project Name CHESHIRE MONITORING STUDY 90107A
 AIR 20020038 ARRIVAL DATE: 2/21/2002 DUE DATE: 3/14/2002

Sampler
 Mike Murphy

Cooler ID O2AH311 Page 5-140036

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
O2AH31D01	D01	01/02/2002 00:00:00	○ Grab ● Com	GHS	1	5-340147 1 to 1

Bottle No. 1

Parameter
 PM10

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
O2AH31S01	S01	01/02/2002 00:00:00	○ Grab ● Com	GHS	1	5-340146 1 to 1

Bottle No. 1

Parameter
 PM10

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
O2AH31S02	S02	01/02/2002 00:00:00	○ Grab ● Com	RVHS	1	5-340148 1 to 1

Bottle No. 1

Parameter
 PM10

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
O2AH31S03	S03	01/02/2002 00:00:00	○ Grab ● Com	ADDAVILLE	1	5-340149 1 to 1

Bottle No. 1

Parameter
 PM10

Note: There WAS NO RUN on
 sampler # 3009, RVHS on
 2-1-02.

ENVIRONMENTAL PROTECTION AGENCY
REGION V
CENTRAL REGIONAL LABORATORY
FINAL RESULT REPORT FOR THE TEAM: ANALYTICAL AND INORGANIC (A&I)

DIVISION/BRANCH: AIR DIVISION SAMPLING DATE: 02/01/2002 LAB ARRIVAL DATE: 02/21/2002 DUE DATE: 03/14/2002
DU NUMBER: 90101A DATA SET NUMBER: 20020038 STUDY: CHESHIRE MONITORING STUDY PRIORITY: 1 LABORATORY :CRL

SAMPLE #	CRL LOG NUMBER	SAMPLE DESCRIPTION	SUSPENDED PARTICLE (g/filter)			
1	2002AH31S01	GUIDING HANDS SCHOOL	0.0000			
2	2002AH31D01	GUIDING HANDS SCHOOL	0.0000			
3	2002AH31S03	ADDAVILLE	0.0039			
DATE OF ANALYSIS			02/26-27/2002			
ANALYST			E.8			

Reviewed by: FRN Date: 3/1/2002

CRL SOP: HK015	Date: 07 January 2000	Revision No: 1
Data review for the Analytical and Inorganic Group		Page _ of _

ATTACHMENT II

CRL Analytical and Inorganics Data Review Checklist

Batch Number: 20020038 Facility: CHESHIRE MONITORING STUDY
Parameter: PM10 CRL SOP: AIG-047

Package Overview:	YES	NO
Raw Data Package Complete?	✓	
Results Reported Correctly?	✓	
Special Requests Done?	N/A	
Calculations Checked?	✓	
Calibration Not Exceeded?	N/A	
Manual Peak Integration performed? Circle one IC or GC and Check	N/A	
Field QC Checked?	N/A	
Quality Control:		
Holding Times Met?	N/A	
Preservation Checked?	N/A	
Proper Digestion Verified?	N/A	
Initial Instrument Performance Checks Verified?	✓	
Calibration Verification Checked?	N/A	
Sample-Specific QC (Internal Standards or Analytical Spikes) Okay?	N/A	
Matrix QC Checked?	N/A	
Digestion Blanks Checked?	N/A	
Spiked Blank Checked?	N/A	
LCS (if applicable) Checked?	N/A	
QCS (if applicable) Checked?	N/A	
Final Check		
Technical Review Done?	✓	
Narrative Complete?	✓	

Analyst: ESR Peer Reviewer: FWA
Date: 3/1/02 Date: 3/1/2002
Comments Attached? (Y/N) _____

Data Set Number:	<u>20020038</u>	Parameter:	<u>Suspended Particles</u>
Facility Name:	<u>CHESHIRE MONITORING STUDY</u>		
Study Name:	<u>CHESHIRE MONITORING STUDY</u>		
Date of Narrative:	<u>02/27/2002</u>	Analyst:	<u>ES</u>
		Signature:	<u>E.S.</u>

ANALYSIS CASE NARRATIVE

Three (3) exposed filters were received for suspended particle analysis at the Central Regional Laboratory (CRL) on February 21, 2002. Those filters were fractions of clean filters, prepared at the CRL and sent to the field for exposure. Filter identification numbers and other pertinent information obtained from the individual filters and packaging envelopes are presented in the table below.

Filters ID	Samples ID	Tag Number
Q6280008	2002AH31D01	5-340147
Q6280006	2002AH31S01	5-340146
Q6280007	2002AH31S03	5-340149

Filter equilibrations and final weighting of exposed filters were performed according to CRL.SOP AIG047. Analysis of exposed filters began on 02/26/2002 and was completed on 02/27/2002. All exposed filters were in good conditions.

QUALITY CONTROL (QC):

Analysis results were evaluated using the QC requirements of CRL.SOP AIG047. All the required quality control criteria for the laboratory, method, and system performance audits were evaluated and determined to be within the limits.

SAMPLE RESULTS:

All the sample results are acceptable for use.

ELECTRONIC DATA:

No electronic data.

CHESHIRE AIR MONITORING PROJECT

PM10

Parameter: Suspended Particles

Data Set Numbers: 20020035- 20020040

Date of Analysis 02/26-27/2002

Analyst: ES

BALANCE VERIFICATION:

Standard Weights	Balanced weight	Differences
Actual (g)	Balanced (g)	(g)
Limit +/-0.0005 g		
1.0000	1.0001	-0.0001
2.0000	2.0001	-0.0001
5.0000	4.9998	0.0002

QC-SUMMARY FOR EXPOSED FILTERS

Filter ID	CRL Sample	Analysis	ANALYST	Exposed
Number	I.D Number	Date		weight (g)
Q6280087	2002AH30S02	02/27/02	Analyst 1	4.3952
Q6280087	2002AH30S02	02/27/02	Analyst 2	4.3954
Differences (Limit +/- 5 mg).....				-0.0002
Q6280004	2002AH30S03	02/27/02	Analyst 1	4.3804
Q6280004	2002AH30S03	02/27/02	Analyst 2	4.3807
Differences (Limit +/- 5 mg).....				-0.0003

CHESHIRE AIR MONITORING PROJECT
PM10

Filter ID	CRL Sample	Sampling	Station	Sampler	Pstg	P1/Pa	Total	Pre Weight	Exposed	Weight	PM10
Number	I.D Number	Date	Location	SN	Avg		Volume (M^3)	of filters (g)	weight (g)	Gain	(UG/M^3)
Data set Number 20020038											
Q6280008	2002AH31S01	02/01/02	Guiding Hands School	3012	18.75		0.00	4.3420	4.3370	0.0000	ERR
Q6280006	2002AH31D01	02/01/02	Guiding Hands School	3013	18.20		0.00	4.3721	4.3692	0.0000	ERR
Q6280007	2002AH31S03	02/01/02	Addaville	3011	18.20		0.00	4.3662	4.3701	0.0039	ERR

General information

Standard weights, actual (g)

Balanced weights, balanced (g)

Mettler Toledo

5.00

5.0001

2/26/02 to

1.00

1.0001

S/N 1120181846

0.50

0.5001

2.00

1.9999

7.00

7.0001

SARTORIUS

(500^(mg) + 200 + 200 + 100)

1.0000

1.0001

S/N 37010119

2.0000

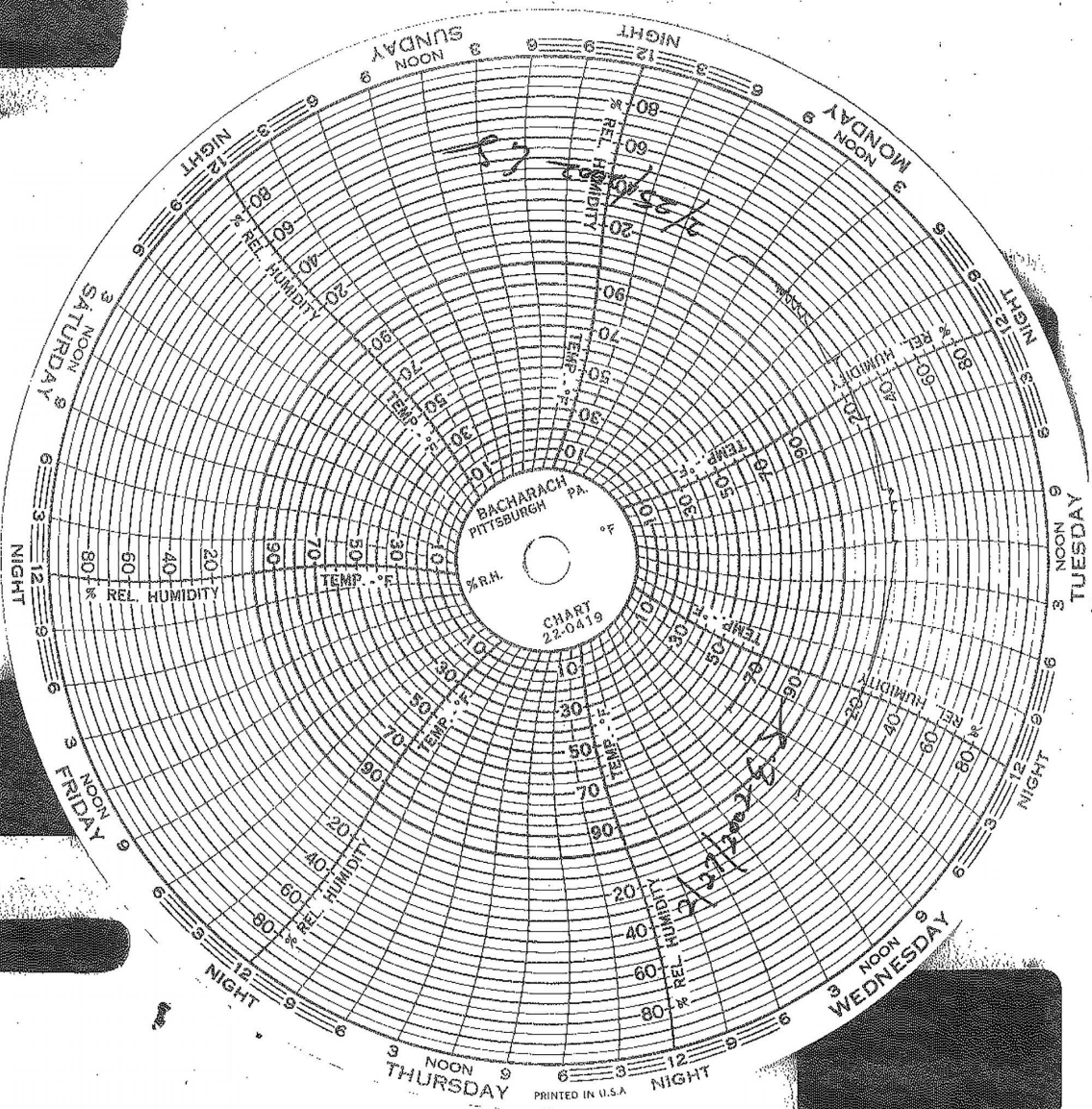
2.0001

2/27/2002 E.S.

5.0000

4.9998

FILTER I.D.	TARE wt (g)	DUP wt (g)	EXPOSED wt (g)	EXPOSED wt. DUP (g)	COMMENTS
Q6280088	4.3680		4.3880		
Q6280087	4.3802		4.3952	4.3954	
Q6280086	4.3774		4.4076		
Q6280010	4.3762		4.3941		
Q6280009	4.3611				
Q6280008	4.3420		4.3370		
Q6280007	4.3662		4.3701		
Q6280006	4.3721		4.3692		
Q6280005	4.3129		4.3332		
Q6280004	4.3647		4.3804	4.3807	
Q6280003	4.3563		4.3715		
Q6280002	4.3415		4.3532		
Q6280001	4.3437		4.3574		
Q6280000	4.3727		4.3816		
Q6279999	4.3639				
Q6279998	4.3384				
Q6279997	4.3703		4.3812		
Q6279996	4.3715				
Q6280093	4.3732				
Q6280094	4.3557				
Q6280095	4.3828				
Q6280124	4.3725				
Q6280125	4.3467				
Q6280123	4.3819		4.4277	4.4281	
Q6280122	4.3809		4.3620		Small



US EPA Region 5 Field Sample



5-340149-1

Parameters PM10

20020038

Preservative None S M M D B D
 Sample ID 02AH31S03 X
 Sampler Mike Murphy
 Date 02-01-02

PM-10

SAROAD

OPERATOR OENA

DATE 2-1-02

TSP

SITE Alameda 3011 06270007

AVG. RECORDER RESP. 18.2

TEMP C K

FINAL WT g

ELAPSED TIME 1440 MINUTES

PRESS mmHg

INITIAL WT g

FLOW m/min

TOTAL FLOW m

SAMPLE WT g

STD ACTUAL

PM-10 ug/m

COMMENTS:

COMMENTS:

STD _____ ACTUAL _____ PM-10 _____ ug/m³
 FLOW _____ m³/min TOTAL FLOW _____ m³ SAMPLE WT _____ g
 ELAPSED TIME _____ MINUTES PRESS _____ mmHg INITIAL WT _____ g
 AVG. RECORDER RESP. _____ TEMP _____ C _____ K FINAL WT _____ g

TSP _____ SITE CHS 3012, 6292008
 SAROAD _____ OPERATOR OJRA DATE 2-1-02

US EPA Region 5 Field Sample



5-340146-1

Parameters PM10

20020038

Preservative None

S M M D B D

Sample ID 02AH31S01

X

Sampler Mike Murgal

Date 02-01-02

US EPA Region 5 Field Sample



5-B40147-1

Parameters PM10

200202038

Preservative None S M M D B D

Sample ID 02AH31D01 X

Sampler *Nicko Murphy*

Date 02-01-02

PM-10 ☒ SAROAD _____ OPERATOR *DEPT* _____ DATE *2-1-02*

TSP _____ SITE *CHS 3013* *06250006*

AVG. RECORDER RESP. *18.2* _____ TEMP _____ °C _____ K _____ FINAL WT _____ g

ELAPSED TIME *44.0* MINUTES PRESS _____ mmHg INITIAL WT _____ g

FLOW _____ m/min TOTAL FLOW _____ m SAMPLE WT _____ g

STD _____ ACTUAL _____ PM-10 _____ µg/m³

COMMENTS: _____